Scope of the Claims

[1] A printed circuit board design instruction support method between a circuit design and a circuit board design, wherein

in order to securely perform the creation support, the communication, and the confirmation of an instruction, which are performed between a circuit designer and a circuit board designer,

said method supports the provision of technical information for understanding the contents of support and instruction.

[2] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of an instruction, which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for supporting the provision of technical information for understanding the contents of support and instruction.

[3] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction,

which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for easily performing the creation support of a design instruction to be passed from the circuit designer to the circuit board designer, by electronic data.

[4] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for inputting design instruction information in natural language;

means for displaying the design instruction information, which was input by said input means, in a list format; and

means for selecting the design instruction information that was displayed by said display means.

[5] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a

circuit board designer, wherein

said device comprising:

means for automatically extracting target items under conditions allocated for keywords of a clock line or the like out of item groups of circuit parts, wirings and the like that constitute a circuit diagram.

[6] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit design and a circuit board design, wherein

said device comprising:

means for automatically allocating design instruction information for items in a circuit diagram via keywords that are previously allocated for the design instruction information in order to notify which item of the circuit parts, wirings and the like on an actual circuit diagram falls under registered design instruction information.

[7] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for selecting items such as the circuit parts and the wirings, which constitute the circuit diagram; and

means for cooperating a circuit design system and a printed circuit board design system and highlighting a target item on both the circuit diagram and a printed circuit board diagram when said means for selecting items selects an item.

[8] The printed circuit board design instruction support device between a circuit design and a circuit board design according to Claim 6, said device comprising:

means for displaying areas to be checked more clearly and in a easier-to-understand manner through zooming up or the like of a target area by executing prescript and postscript for controlling the display condition simultaneously with the selection of items by said means for selecting items.

[9] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for managing whether or not a printed circuit

board designer followed design instructions, by inputting a result after designing.

[10] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for managing the presence and the like of authorization to an instruction by inputting pass-fail by a circuit designer to the result after designing, which was input by the printed circuit designer.

[11] The printed circuit board design instruction support device between a circuit design and a circuit board design according to any one of Claim 9 and Claim 10, wherein

said device comprising:

means for performing history management of pass-fail judgment and the like by separately adding an empty article for inputting in said management means when a correction of printed circuit board design is necessary.

[12] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the

communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for extracting damping resistances and target ICs of the resistances from a circuit diagram based on the part attribute and wiring connection information of the damping resistances.

[13] The printed circuit board design instruction support device between a circuit design and a circuit board design according to Claim 12, wherein

said extraction means automatically extracts the damping resistances and the target ICs of the resistances from the circuit diagram.

[14] A printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer, wherein

said device comprising:

means for extracting a bypass capacitor and a target IC of the capacitor from a circuit diagram based on the arrangement positional information and wiring connection information of the bypass capacitor.

[15] The printed circuit board design instruction support device between a circuit design and a circuit board design according to Claim 14, wherein

said extraction means automatically extracts the bypass capacitor, the target IC of the capacitor, and the information of wiring connecting the both parts.

[16] A Web system, comprising:

means for providing information, which is accumulated in a Web server, in response to a request from a printed circuit board design system or a printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer.

[17] A Web system, comprising:

means for performing calculation in the Web server and providing the result of the calculation in response to a request from a printed circuit board design system or a printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer.

[18] A Web system, comprising:

means for accumulating information in a Web server in response to a request from a printed circuit board design system or a printed circuit board design instruction support device between a circuit design and a circuit board design to securely perform the creation support, the communication, and the confirmation of the instruction, which are performed between a circuit designer and a circuit board designer.

[19] A program for allowing a computer to execute the printed circuit board design instruction support method between a circuit design and a circuit board design according to Claim 1.

[20] A program for allowing a computer to function as the printed circuit board design instruction support device between a circuit design and a circuit board design according to any one of Claims 2 to 15.

[21] A program for allowing a computer to function as the Web system according to any one of Claims 16 to 18.

[22] A computer-readable recording medium recording the program according to any one of Claims 19 to 21.